41

3753

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

policant:

Joseph A. King

Serial No.:

09/923,850

Examiner:

Lee

Filed:

8/7/01

Group: 3753

For:

DOSE SYSTEM

Attorney File: 5568

by applicant's attorney, Carl L. Johnson.

Carl L. Johnson

Mach 17, 2004

Honorable Commissioner of Patents and Trademarks Washington D. C. 20231

RECEIVED

MAR 3 0 2004

REMARKS

**TECHNOLOGY CENTER R3700** 

Sir.

In the previous response the applicant elected claims 1, 2, 5, 6, 10, 12, 13, 18, 21, 22, 23, 24, 25, 26 & 27. In the office action of December 17, 2003 the office rejected claims 10, 12, 13, 18, 21-23 and 25-27 under 35 U.S.C. 102 as being anticipated by Garelick 2,326,212. Claims 1, 2, 5 and 6 were rejected under 35 U.S.C. 103 as being unpatentable over Hubert 3,194,444 or Garelick. Claim 24 was rejected under 35 U.S. C. 103 as being unpatentable over Garelick in view of Sexton 5,251,656.

In regard to the rejection of claims 1, 2, 5, and 6 under 35 U.S.C. 103, the applicant points out that the present invention is a contrary teaching to the cited art of Garelick and Hubert. More specifically, the present invention delivers a quick dispensing material over a period of time through a process of "entertainment" wherein the fluid flowing past the opening in the container replaces the quick dispensing material in the container. The entertainment process involves a

circulation i.e. an exchange between the fluid in the stream and the liquid in the container with the concentration of the liquid in the container becoming more diluted as the fluid in the stream gradually replaces the liquid in the container. This is the exact opposite of what happens in Hubert or Garelick who teach the direct emptying of their containers.

The entrainment produced by applicant is more fully described on page 8 lines 11-18 of applicant's specification which states:

"Briefly, fluid entrainment occurs when one fluid flows laterally past another fluid at rest. The pressure of the fluid moving past the stationary fluid is less than the pressure of the fluid at rest causing fluid from the container 10 flow into the fluid stream until a state of equilibrium is reached. When the state of equilibrium is reached between the fluid in the container and the moving stream a secondary circulation of fluid occurs as the fluid in the container is gradually entrained or pulled into the fluid stream while fresh fluid in the stream slowly flows into the container to replace the fluid entrained into the fluid stream."

Note, in applicant's apparatus the fluid in the stream gradually <u>replaces</u> the fluid in the container in order for the liquid in the container to be dispensed into the system. Thus applicant's container retains a fluid therein. The opposite occurs in the apparatus of Hubert and Garelick where the contents of their containers are emptied of liquids.

A review of the Garelick patent 2,326,212 discloses that he does not have fluid flowing laterally past his mouth 15. Garelick points out that a suction is formed in his container 17 which draws chlorine upward form reservoir 12. As the chlorine is drawn upward from the reservoir the level of his fluid 13 is lowered which allows more chlorine to flow into the container 12 until eventually the container 12 is emptied. Thus Garelick provides an apparatus for emptying a container.

A review of Hubert Patent 3,194,444 discloses that he has a receptacle 14 that contains a liquid 42 that is forced out of receptacle 14. More specifically, he states:

"The water entering the duct 22 thus pressurizes the contents 42 of the container 14, to force such contents outward through the elongated duct piece 32 of the outlet valve, and through the flared seat 34 into the liquid stream directed to the water outlet 20."

Thus, Hubert like Garelick provides an apparatus for <u>emptying</u> a container by increasing the pressure in his container.

In order to more clearly bring out the differences between applicant's invention and the apparatus of Hubert and Garelick claim 1 has been amended to point that an inlet directs water laterally past the opening in the housing. As Garelick does not have or teach an inlet to direct water laterally past the end of his siphon tube and Hubert likewise does not have or teach an inlet to direct water laterally past his elongated duct piece it is submitted that claims 1, 2, 5, and 6 are allowable over either Garelick or Hubert.

The office contend that method claims 10, 12, 13 and apparatus claims 18, 21, 22, 23, 25 and 27 were anticipated by either Hubert or Garelick under 35 U.S. C. 102. The rejections is in error. In regard to the method claims 10, 12 and 13 the office attention is directed to applicant's method of:

"opening the container to allow water to flow laterally past the spout to entrain and dispense the quick dispensing water treatment material...."

A review of Hubert shows that his fluid does not flow laterally past the end of his conduit 32 which extends to the bottom of his container 42. Similarly, a review of Garelick revels that his siphon tube 16 is located at the bottom of a container that is external to his bottle 10. Accordingly, is submitted that the rejection of claims 10, 12 and 13 is in error.

In regard to the rejection of independent system claim 18 under 35 U.S.C. 102 on Garelick. It is submitted the office is in error. More specifically Garelick does not disclose "a stream of water flowing through said dispersal valve". A review of Garelick shows that he siphons liquid through

 pipe 16' into his suction line 11. Thus, Garelick draws liquid from his device but he does not direct "a stream of water through his dispersal valve"

In regard to the rejection of independent system claim 18 under 35 U.S.C. 102 on Hubert. Claim 18 has been amended to point out that the container has a spout and that an inlet directs the water laterally past the spout to indirectly meter the quick dispensing material into the system. This feature is not shown in Hubert since he sucks the material from his container through his duct 32. Accordingly, it is submitted that claim 18 is allowable over Hubert.

In regard to the rejection of independent apparatus claim 21 and dependent claims 22, 23 and 24 under 35 U.S.C. 102 on Garelick and Hubert. Claim 21 has been amended to point out that the inlet directs a stream of water laterally past the opening in the spout. A feature not shown in either Garelick or Hubert. Accordingly, it is submitted that independent claim 21 is allowable over Hubert and Garelick and that the dependent claims are also allowable since they are dependent on an allowable independent claim.

In regard to the rejection of claims 25, 26 and 27 under 35 U.S.C. 102 on Garelick and Hubert it is submitted the office is in error. More specifically claim 25 calls for:

"a conduit for directing a stream of water along a first axis extending through a portion of said dispersal unit, said conduit having a <u>lateral opening to the chamber</u> so that when a stream of water flows through said conduit it produces <u>a lateral cross circulation</u> between the quick dispensing water treatment material and the stream of water to <u>gradually dilute the first concentration of water treatment material in the compartment</u> while increasing a second concentration of quick dispensing water treatment material in the system outside the compartment." (emphasis added)

It is submitted that neither Hubert or Garelick discloses a lateral opening to a chamber so as to produce a lateral cross circulation that gradually dilutes the concentration of water treatment material in the compartment. Indeed, the opposite happens with Hubert and Garelick since they

• empty there containers as opposed to exchanging fluids to alter the concentration of the fluid in their containers.

In regard to the rejection of dependent claim 24 it is submitted that parent claim 21 is now allowable and therefore dependent claim 24 is also allowable.

Accordingly, it is submitted that claims 1, 2, 5, 6, 10, 12, 13, 18, 21, 22, 23, 24, 25, 26 & 27 are allowable and that the remaining claims are also allowable over the art.

Respectfully submitted, JACOBSON AND JOHNSON

Carl L. Johnson, Reg. No. 24,273

Attorneys for Applicant Jacobson and Johnson

Suite 285

One West Water Street

St. Paul, Minnesota 55107-2080

Telephone: 651-222-3775